

WE CLAIM:

1. A computer security service for a computer network accessible by users and comprising services and resources, the computer security service comprising,

a policy builder component, comprising

- 5 a network constituent definition component, for defining user data and services and resources data corresponding to the computer network users, services and resources, and

a policy definition component for defining access policies for the computer network users, services and resources,

- 10 a database component for maintaining user, services and resources data, and access policies, and for providing a set of selected access policies in response to a database query, and

a validator component, comprising

- 15 a request parser for receiving a policy query for service or resource access originated by a network user and for generating a corresponding database query for submission to the database component, and

a policy parser for receiving the set of access policies provided by the database component in response to the corresponding database query and for generating a policy decision for communication to the network user

- 20 based on the set of access policies provided by the database component.

2. The security service of claim 1 in which the policy builder component comprises a graphical user interface for displaying

a grid having nodes, laid out on a first and on a second axis,

- 25 user labels corresponding to the user data, each user label labelling nodes

aligned relative to the first axis of the grid, and

resource labels corresponding to the services and resources data, each  
resource label labelling nodes aligned relative to the second axis of the grid,

the nodes in the grid corresponding to the access policies for users and services  
and resources, as defined by the user and resource labels.

3. A graphical user interface for a security service for a computer network, the  
computer network comprising defined users, services and resources, the graphical  
user interface displaying

a grid comprising nodes laid out on a first and on a second axis,

user labels corresponding to defined users, each user label labeling nodes  
aligned relative to the first axis of the grid,

resource labels corresponding to the defined services and resources, each  
resource label labeling nodes aligned relative to the second axis of the  
grid, and

the nodes in the grid corresponding to access policies for the defined users and  
defined services and resources for the computer network, corresponding to the  
user and resource labels.

4. A graphical user interface for a security service for a computer network, the  
computer network comprising defined users represented by a business relationship  
tree data structure, the computer network further comprising services and resources,  
represented by a resource tree data structure, the graphical user interface comprising  
display means for displaying

a grid comprising nodes laid out on a first axis and on a second axis,

user labels corresponding to the users in the business relationship tree data

structure, each user label labelling nodes aligned relative to the first axis of the grid, and

resource labels corresponding to the defined services and resources in the resource tree data structure, each resource label labelling nodes aligned relative to the second axis of the grid,

the nodes in the grid corresponding to access policies for the defined users and defined services and resources, corresponding to the user and resource labels.

5. A computer security service for a computer network accessible by users and comprising services and resources, the computer security service comprising,
  - a policy builder component available to one or more policy managers, for defining access policies for the computer network users, services and resources, and
  - a web-based delegated administration component accessible to users for defining access policies for the computer network users, services and resources, the delegated administration component comprising a graphical user interface available to users for defining said access policies.
6. The computer security service of claim 5 in which the delegated administration component is implemented as a service supported by the computer security service.
7. The computer security service of claim 5 in which the graphical user interface comprises one or more HTML format pages accessible to users.
8. The computer security service of claim 5 further comprising a delegated administration definition component for defining delegated administration permissions for users whereby users are selectively enabled to use the delegated administration component to define access policies for specified resources and users.
9. The computer security service of claim 8 in which the delegated administration

definition component further comprises a graphical user interface for displaying a grid having nodes, laid out on a first axis and on a second axis, each node corresponding to a variable set of users, potentially including the null set, for which delegated administration permissions are granted, the position of each node relative to the first and second axes in the grid defining the users and the resources, respectively, for which permissions are granted for the node.

10. The computer security service of claim 9, the graphical user interface further comprising an array of nodes relative to the second axis for defining specified users enabled to modify user data maintained by the computer security service, the position of each node in the array of nodes, relative to the first axis, defining the user data for which the modification of data is enabled.
11. A computer program product for users with a computer network, said computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for implementing the computer security service of claim 5, 6, 7, 8, 9, or 10.
12. The security service of claim 2, the graphical user interface further comprising an array of nodes relative to the second axis for defining specified users enabled to modify user data maintained by the computer security service, the position of each node in the array of nodes, relative to the first axis, defining the users for which the modification of data is enabled.
13. The graphical user interface of claim 3 or 4 further comprising an array of nodes relative to the second axis for defining specified users enabled to modify user data maintained by the computer security service, the position of each node in the array of nodes, relative to the first axis, defining the users for which the modification of data is enabled.